

(No Model.)

L. BILLHIMER.
WIRE FENCE STAY.

No. 536,062.

Patented Mar. 19, 1895.

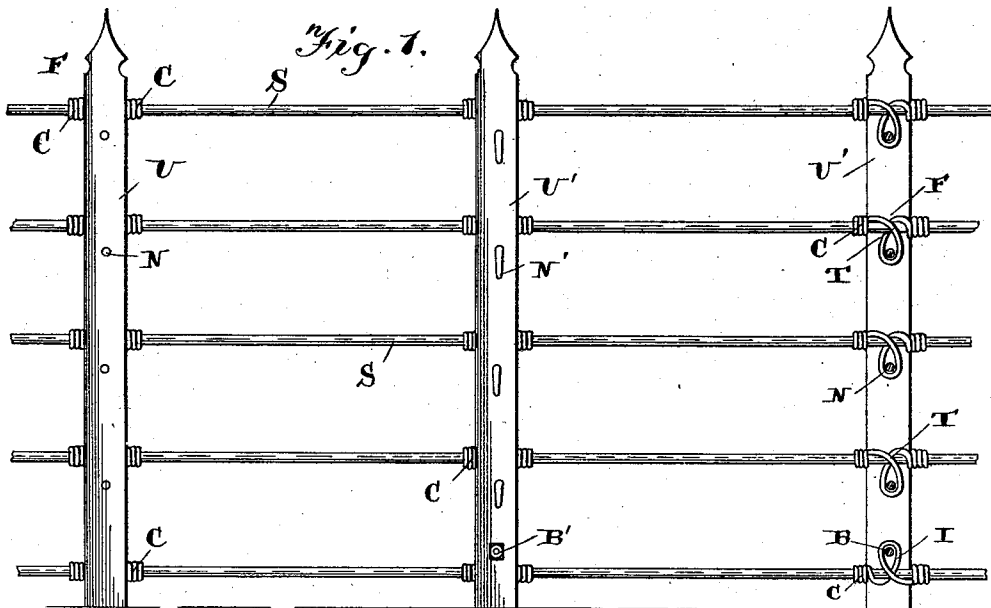


Fig. 2.

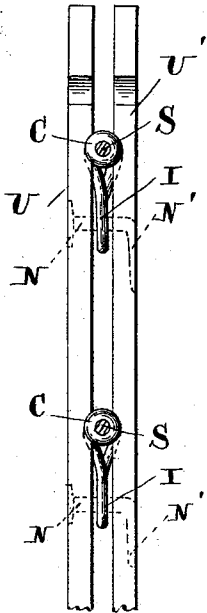


Fig. 3.

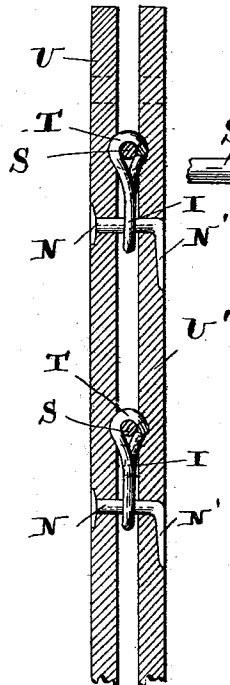


Fig. 4.

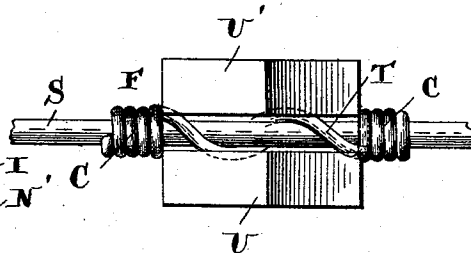
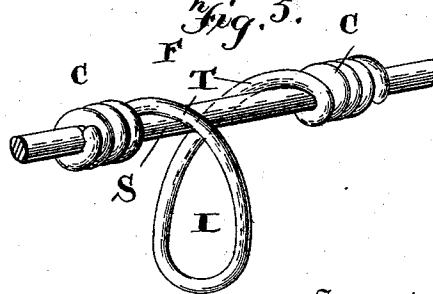


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

LEVI BILLHIMER, OF PAINTER CREEK, OHIO, ASSIGNOR OF TWO-THIRDS TO
LAWRENCE KREIDER AND WILLIS KREIDER, OF SAME PLACE.

WIRE-FENCE STAY.

SPECIFICATION forming part of Letters Patent No. 536,062, dated March 19, 1895.

Application filed December 28, 1894. Serial No. 533,183. (No model.)

To all whom it may concern:

Be it known that I, LEVI BILLHIMER, a citizen of the United States, and a resident of Painter Creek, Darke county, State of Ohio, have invented certain new and useful Improvements in Fence-Stays; and my preferred manner of carrying out the invention is set forth in the following full, clear, and exact description, terminating with claims particularly specifying the novelty.

This invention relates to wire fences and the stays connecting the stringer wires thereof, and more especially to the means employed for fastening said stays to the stringers; and the object of the same is to produce an improved stay fastener permanently connected with the stringer wire and to which the stay is detachably connected.

To this end the invention consists in a stay fastener constructed substantially as hereinafter described and claimed, and as illustrated in the drawings hereto attached and forming part of the specification, wherein—

Figure 1 is an elevation showing several stringer wires and at the left a stay attached thereto by my improved means, at the center the reverse or rear side of such a stay, and at the right, a stay of this character with the front half thereof removed. Fig. 2 is a cross section of the fence, showing a stay in side elevation. Fig. 3 is a central vertical section through one of the stays. Fig. 4 is a plan view of one of the stays and the fastener, and Fig. 5 is a perspective detail of one of the fasteners.

In all of the said views, the letter S designates the fence wire or stringer, which may be of band or ribbon wire though it is preferably of ordinary wire, with or without barbs as desired.

U, U' are the two parts or members of an upright stay, preferably of wood suitably painted and ornamented, and possibly having a picket head at the upper end, although the matters of material, design, size, and proportion are to be left to the manufacturer. In general contour, this stay is made of two strips standing opposite each other, parallel, and vertical, and extending along the front and rear sides respectively of the several stringer wires S.

My improved fastener F as best seen in Fig.

5, consists of a single piece of wire having coils C at its extremities which surround the stringer wire S, the inner ends of the coils being continued in open twists T passing over and then down on opposite sides of the stringer, and the inner ends of the twists being connected in a flat upright eye I which hangs beneath the stringer—the arrangement of parts being best seen at the right of Fig. 1. These fasteners are applied to the wire in any preferred manner, either when the same is made, or by slipping them onto the wire after it is made and moving them along thereon until they stand at proper distances apart; but the coils C preferably quite tightly embrace the stringer, and the inner ends of such coils are preferably spaced a distance apart equal to the lateral width of the stay members.

In building this fence by the use of any improved machinery or devices for gaging the stringer wires at their proper distances apart, the several fasteners on the different stringers are arranged so as to be in vertical alignment with their eyes I pendent except that of the lowermost fastener which preferably rises above the stringer, as seen at the right of Fig. 1. The two sections U, U' of the stay are then applied and wedged in between the inner ends of the coils C of the several fasteners. A nail N is then driven through the front stay member U, through the eye I of the fastener, through the rear stay member U', and clinched against the rear face of the rear stay member as at N' at the center of Fig. 1; or, if preferred, a bolt B may be passed through these several parts and may carry a nut B' on its rear end as also illustrated at the center of Fig. 1 toward the bottom of the stay there shown; or, again, if preferred, a screw could be used at this place, although I have not illustrated it. With the first construction, when it is desired to detach the stay, the nail must be straightened out or unclined; but with the second construction, it is simply necessary to remove the nut. In any case the connecting devices are then withdrawn, after which the stay members can be removed from position.

It will be observed from Fig. 4 that the twists T toward the center of each fastener are embedded slightly in the inner faces of

the stay members, and that the latter stand against the inner ends of the coils C at the extremities of the fastener. This construction prevents to a great degree the movement of the fastener longitudinally of the stringer, and holds all parts firmly in their proper positions, yet permitting the stay members to come as closely as possible to the opposite faces of the stringers. As above stated, the exact sizes, shapes, materials, and proportions of parts may be varied to a considerable extent without departing from the principle of my invention.

What is claimed as new is—

1. In a wire fence, the combination with the stringers, and the stays each made in two members standing on opposite sides of said stringers; of the herein described fastener consisting of a single piece of wire having coils at its extremities embracing the stringer with their inner ends resting against the edges of the members of the stay, open twists next inside said coils and standing between the stay members, and an eye connecting the inner ends of the twists and standing out of alignment with the stringer; and a connecting device passing through the two members of the stay and through the eye between them, substantially as set forth.
2. In a wire fence, the combination with the stringers, and the stays each made in two members standing on opposite sides of said

stringers; of the herein described fastener consisting of a single piece of wire having coils at its extremities embracing the stringer, open twists next inside said coils and standing between the stay members into whose inner faces they are embedded, and an eye connecting the inner ends of the twists and standing out of alignment with the stringer; and a connecting device passing through the two members of the stay and through the eye between them, substantially as set forth.

3. In a wire fence, the combination with the stringers, and the stays each made in two members standing on opposite sides of said stringers; of the herein described fastener consisting of a single piece of wire having coils at its extremities embracing the stringer, open twists next inside said coils and standing between the stay members, and an eye connecting the inner ends of the twists; and a nail driven through the front stay member, through the eye of the fastener, through the rear stay member, and clinched upon the face of the last-mentioned member, substantially as set forth.

In testimony whereof I have hereunto subscribed my signature on this the 17th day of December, 1894.

LEVI BILLHIMER.

Witnesses:

H. H. BIRELEY,
A. H. SWINGER.